BEFORE THE

# Federal Communications Commission

WASHINGTON, D.C.



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| In the Matter of | ) | |
| | ) | |
| Amendments to Parts 1, 2, and 101 | ) | WT Docket No. 99-327 |
| of the Commission's Rules to | ) | |
| License Fixed Services at 24 GHz | ) | |

## COMMENTS OF TELIGENT, INC.

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Dated: January 19, 2000

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## SUMMARY

The Commission's intention to assign future spectrum in the 24 GHz band through competitive bidding as well as the proposed generally deregulatory approach to licensees operating in the band is consistent with principles that must guide the Commission throughout this proceeding. Many of the proposals in the Notice represent a sound approach to spectrum licensing policy, and consequently, Teligent agrees with most of the tentative conclusions set forth by the Commission in the Notice. Specifically, Teligent believes that:

- A flexible licensing plan for the 24 GHz band will yield the most efficient operation and provide for optimum consumer welfare. Such a plan should include lifting any constraints on the services carriers may choose to offer, the use of EAs as licensing territories, and adequate protection for the services incumbent carriers provide to consumers.

- The Commission's proposed application, licensing, and processing rules will afford licensees maximum flexibility by allowing carriers to self-designate their regulatory status and to aggregate/disaggregate and partition their spectrum pursuant to the demands of the market.

- If the Commission adopts its proposal to permit ILECs to participate in the auction for 24 GHz licenses, the Commission must adopt safeguards that fully account for the ILEC's current dominant position in the local exchange market, including their pervasive access to multi-tenant buildings that other competitors do not enjoy.

- The Commission should extend its current foreign ownership rules to 24 GHz licensees.

- A substantial license term and quantifiable renewal expectancy is necessary for regulatory stability at 24 GHz.

- Licensees in the 24 GHz band should be subject to the same level of Title II forbearance as other non-dominant common carriers.

- Frequency coordination among licensees is a critical requirement to maintaining orderly use of the 24 GHz spectrum band, particularly as the need for individual nodal station applications is eliminated.

- The emission mask adopted for 24 GHz should be the same as that for other Part 101 Fixed Microwave Services; consistent application of the emission mask to aggregated channels is necessary; and the emission mask should not be made applicable to subchannels.

- The Commission's user station antenna directivity requirement should be eliminated and its channel plan should be amended to permit Time Division Duplex technology.

- Equipment manufactured for service in the 24 GHz band should be subject to the Commission's verification procedures, rather than its certification requirements.

- In order to ensure both competitive parity with other fixed wireless providers and the future competitiveness of the broadband fixed wireless market, it is imperative that the Commission make every effort to conduct the 24 GHz auction as soon as possible and as close in time to the recently scheduled 39 GHz auction as possible.

- Adoption of competitive bidding procedures for the allocation of spectrum for mutually exclusive applications is consistent with statutory requirements and will lead to the rapid deployment of service in the 24 GHz band, but bidding credits should be made consistent with those provided for in the auction of the 39 GHz band.

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## COMMENTS OF TELIGENT, INC.

Teligent, Inc. ("Teligent") hereby submits its comments in the above-captioned proceeding.[1]

## I. BACKGROUND

Teligent is a full-service, integrated communications company offering high-quality local, long distance, high-speed data, and dedicated Internet service to small and medium-sized business customers. For over two years, Teligent has been rapidly deploying point-to-point and point-to-multipoint fixed wireless microwave technology for the provision of competitive local exchange and other services utilizing the frequencies in the 24 GHz band that are the subject of the Commission's Notice. Teligent provides its services in numerous markets across the nation, pursuant to licenses granted to it by the Commission.[2] As a result of its development of these

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1 Amendments to Parts 1, 2, and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Notice of Proposed Rulemaking*, FCC 99-333 (rel. Nov. 10, 1999) ("Notice").

2 Teligent holds 24 GHz Digital Electronic Message ("DEMS") licenses in 74 major metropolitan areas throughout the United States and currently offers the full complement of its services in 40 of these markets.

frequencies for non-governmental commercial use, Teligent today offers a wide range of telecommunications services over its own national facilities-based network in competition primarily with incumbent local exchange carriers ("ILECs"). Accordingly, Teligent applauds the Commission's release of this Notice which will modernize the operational rules and licensing procedures suited for this particular frequency band and make additional spectrum available in this time of rapid technological advance and innovation, and ever increasing demand for broadband fixed wireless services.

## II. INTRODUCTION

The Commission's intention to assign future spectrum in the 24 GHz band through competitive bidding as well as the proposed generally deregulatory approach to licensees operating in the band is consistent with principles that must guide the Commission throughout this proceeding. These principles are all the more relevant in light of the Commission's repeated conclusions in many other proceedings of late that facilities-based entrants, such as Teligent and other potential licensees of this 24 GHz spectrum, face substantial barriers to entry.[3] Many of the

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[3] See, e.g., Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Interexchange Carrier Purchases of Switched Access Services Offered by Competitive Local Exchange Carriers; Petition of U S West Communications, Inc. for Forbearance from Regulation as a Dominant Carrier in the Phoenix, Arizona MSA, CC Docket Nos. 96-262, 94-1, 98-157, *Fifth Report And Order And Further Notice Of Proposed Rulemaking*, FCC 99-206, at ¶ 81 (rel. Aug. 27, 1999) (describing substantial sunk investments associated with collocation); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, *Third Report and Order and Fourth Further Notice Of Proposed Rulemaking*, FCC 99-238, at ¶¶ 183, 259-271, 332-368, 374-378, 386-398, 410-416 (rel. Nov. 5, 1999) (concluding that (1) construction of loops, (2) acquisition of switches, (3) establishing collocation arrangements, (4) construction of interoffice transport, (5) signaling networks, and (6) call-related databases each represents a significant entry barrier); Federal-State Joint Board on Universal Service, CC Docket No. 96-49, *Report and Order*, 12 FCC Rcd 8776, at ¶ 153 (1997); (acknowledging that construction of independent loop and

proposals in the Notice represent a sound approach to spectrum licensing policy, and consequently, Teligent agrees with most of the tentative conclusions set forth by the Commission in the Notice. Indeed, as Teligent will discuss in more detail below, the Commission's proposals reflect an approach to the efficient allocation and utilization of spectrum in the 24 GHz band consistent with the Commission's recently adopted spectrum policy statement to promote competition, a policy statement Teligent similarly supports.[4]

Government regulation (in the absence of market failure) can hamper asset allocation and yield inefficient results.[5] Because regulatory intervention by the government does not rely on

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switching constitutes a "substantial" entry barrier); Promotion of Competitive Networks in Local Telecommunications Markets; et al., WT Docket No. 99-217; CC Docket No. 96-98, *Notice of Proposed Rulemaking and Notice of Inquiry in WT Docket No. 99-217, and Third Further Notice of Proposed Rulemaking in CC Docket No. 96-98*, FCC 99-141, at ¶ 19 (rel. July 7, 1999) ("Competitive Networks NPRM") ("The major economic obstacle to the development of competitive facilities-based networks, at least if pursued through a traditional wireline model, is the extensive investment necessary to duplicate the existing wireline networks. The incumbent LECs' networks have been built over the course of many years, generally under a regime of rate of return regulation, and have been supported by an elaborate system of explicit and implicit subsidies. Nonetheless, some facilities-based entry strategies show promise of surmounting the competitive advantages inherent in the incumbent LECs' control of in-place facilities by avoiding the need to construct new, costly wireline networks."); id. at ¶ 29 ("Access by competing telecommunications service providers to customers in multiple tenant environments is critical to the successful development of competition in local telecommunications markets.").

4 See Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium, *Policy Statement*, FCC 99-354, at ¶ 2 (rel. Nov. 22, 1999) ("Our intent is to pursue policies that promote competition and encourage the development of emerging telecommunications technologies. . . . With increased demand for a finite supply of spectrum, the Commission's spectrum management activities must focus on allowing spectrum markets to become more efficient and increasing the amount of spectrum available for use.") ("1999 Spectrum Policy Statement").

5 See Herbert Hovenkamp, Marginal Utility and the Coase Theorem, 75 Cornell L. Rev. 783, 784 (1990) (citing Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cathedral, 85 Harv. L.

natural market forces of supply and demand, rules for assignment and use of spectrum and other decisions affecting the market may be considered "artificial." In recognition of the above, this Commission has increasingly chosen to rely on market forces and to refrain from regulating unduly in order to minimize artificial market distortions.[6] It has recognized that where competition exists in the marketplace, government regulation often serves to inhibit -- rather than promote -- resources from reaching their highest and best use.[7] The Commission should therefore regulate only to the extent that it fears market failure, i.e., situations where competition is insufficient to push carriers to lower prices, improve quality, and make maximum efficient use of their spectrum.[8]

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Rev. 1089 (1972)); see also In the Matter of Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, WT Docket No. 96-6, *Notice of Proposed Rule Making*, 11 FCC Rcd 2445, at ¶ 13 (1996) (restrictions on use of channels "hinders carriers from quickly and economically using channel capacity to meet changing market demand.").

6 See Remarks of William E. Kennard, Chairman, Federal Communications Commission, United States Telecom Association Annual Convention, San Francisco, California (Oct. 18, 1999) (as prepared for delivery) ("The whole world is watching how we manage this momentous shift in our law and our policy and our markets from monopoly to competition.") ("Chairman Kennard's USTA Remarks").

7 See Streamlining the Commission's Rules and Regulations For Satellite Application and Licensing Procedures, IB Docket No. 95-117, *Notice of Proposed Rule Making*, 10 FCC Rcd 10624, at ¶ 35 (1995) ("[W]e recognize that government interference with market forces through unnecessary regulation is costly. Such costs include the actual out-of-pocket costs incurred by industry in complying with various regulatory requirements as well as by government in administering these regulatory schemes."); Streamlining the International Section 214 Authorization Process and Tariff Requirements, IB Docket No. 95-118, *Notice of Proposed Rulemaking*, 10 FCC Rcd 13477, at ¶ 1 (1995) ("[B]ecause regulation can interfere with market forces, it may also have an adverse impact on economic efficiency and consumer welfare.").

8 See Chairman Kennard's USTA Remarks ("Some say, if you just deregulate, then competition will magically arrive. Well that theory may work in some industries, but not

The Commission's stated goal in the Notice is for the 24 GHz band to reach its highest and best use through accommodating the introduction of new uses of spectrum and the enhancement of existing uses as well as to facilitate the awarding of licenses to entities who value them the most. Its proposals to adopt rules that provide carriers with the maximum amount of flexibility so as not to restrain services, while at the same time imposing a minimum amount of regulatory obligations, is the proper framework for promoting not only local competition, but the growth and development of other innovative services. The Commission's Notice generally takes notice of this fact. Accordingly, Teligent supports the Commission's efforts to dispose of unnecessary regulations such as the requirement to file individual nodal station applications in a licensed market area after the initial node has been constructed or to impose specific tariff-related obligations in Part 101 of the Commission's Rules.

Finally, principles of regulatory symmetry -- differences in regulation must be based upon relevant differences in circumstances -- complement a market-based approach to licensing spectrum by fostering a level playing field for competitors using similar technology yet different spectrum. These principles demand that the Commission regulate services in the 24 GHz band in a manner similar to its regulation of other fixed wireless carriers offering comparable services and subject to similar competitive forces. Without such symmetry, the Commission's regulations will disadvantage certain carriers through artificial regulatory constraints. Such constraints, if not checked, can act as barriers to the competitive development of wireless services. With a few

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> in a networked industry where control of the essential building blocks of competition - the loops and central offices - is still in the hands of only a few established competitors. . . . So the challenge is finding the right balance between imposing rules to introduce competition,

exceptions, discussed more fully below, the Notice properly proposes rules that do promote regulatory symmetry among fixed wireless providers.

## III. A FLEXIBLE LICENSING PLAN FOR THE 24 GHz BAND WILL YIELD THE MOST EFFICIENT OPERATION AND PROVIDE FOR OPTIMUM CONSUMER WELFARE.

Teligent supports the Commission's goal of providing 24 GHz licensees with maximum flexibility in the use and design of their systems.[9] So long as the rules adopted provide sufficient interference protection to incumbent services in the band, a flexible approach of allowing the market to further develop the uses of the 24 GHz band will promote the highest and best use of the spectrum, consistent with the Communications Act. The Commission's shift from a regulatory role where it "actively determined the best use for each block of spectrum and assigned spectrum according to specific criteria," to one where "the Commission has relied less on administrative efforts to determine the best uses of spectrum," is well documented.[10] The Commission's recent policies have "allowed service providers increased flexibility to respond to incentives

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and eliminating rules that are no longer needed because competition has taken root. We have to find the right balance . . . between competition and deregulation.").

9 Flexibility in the 24 GHz service rules proposed in the Notice is consistent with, and represents an optimal implementation of, the Commission's recently released spectrum policy statement wherein it stated that "[i]n the majority of cases, efficient spectrum markets will lead to use of spectrum for the highest value end use. Flexible allocations may result in more efficient spectrum markets. Flexibility can be permitted through the use of relaxed service rules, which would allow licensees greater freedom in determining the specific services to be offered . . . ." 1999 Spectrum Policy Statement at ¶ 9.

10 Gregory L. Rosston & Jeffrey S. Steinberg, Using Market-Based Spectrum Policy to Promote the Public Interest, 50 Fed. Comm. L.J. 87, 90 (1997) ("Rosston & Steinberg").

communicated by the marketplace for the efficient production of diverse services that consumers want and need."[11]

Although today the 24 GHz spectrum appears best suited for fixed wireless telephony and broadband services, the Commission's 24 GHz rules should not constrain the market from discovering and developing new applications for the band nor should the Commission endeavor to predict what those might be.[12] Consequently, while equipment for mobile use of the 24 GHz band may not be currently available, nor does Teligent believe it is likely to be available in the near future, Teligent agrees with the Commission's proposal to leave open the possibility that equipment for mobile use of the 24 GHz band (provided again that such use is demonstrated to be compatible with current and future fixed service operations) may be developed in the future. To this end, the Commission should condition a licensee's mobile operations conducted in the 24 GHz band on the avoidance of interference with fixed operations within (and directly adjacent to) a licensee's service areas. This policy will position providers to better respond quickly to the dictates of the marketplace,[13] and will reflect similar policies adopted for GWCS, CMRS, IVDS,

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11 Id. at 90.

12 To this end, although multi-channel video programming is not presently offered in the 24 GHz band, in light of the fact that Teligent has demonstrated to the Commission that it is possible on a limited basis particularly for business-related video programming, the Commission's rules should recognize this possibility and enable 24 GHz spectrum licensees to enjoy the same benefits that other fixed wireless licensees that can offer multichannel video enjoy, namely the benefit of section 207 of the 1996 Telecommunications Act. Specifically, the Commission should extend the provisions of section 207 (regarding over-the-air reception devices) to any DEMS licensee that may offer video programming services.

13 As Commissioner Ness has explained, the Commission has made "great progress in introducing flexibility in the use of the spectrum so that the licensee can be in front of a rapidly changing marketplace." Remarks by Susan Ness, Commissioner, Federal

and wireless services in the 39 GHz band and 28 GHz band. Similarly, Teligent urges the Commission to establish rules that allow DEMS licensees the flexibility to provide both common carrier and non-common carrier services, as well as mobile services.

Moreover, the Notice seeks comment on the interaction between terrestrial fixed wireless services and fixed satellite service operations that may be allocated to and assigned to operate in the 24 GHz band.[14] As the Commission is aware, this proposed fixed satellite allocation at 24 GHz was first raised by DIRECTV, a broadcasting satellite licensee and operator, in a Petition for Declaratory Ruling filed in 1997.[15] The petition was filed simultaneously with a DIRECTV application to use 200 MHz of the 24 GHz DEMS spectrum, i.e., 25.05-25.25 GHz, for broadcasting satellite service feederlinks. Since that time, DIRECTV has indicated to the Commission that it no longer desires to use this spectrum for BSS uplinks, recognizing the use of these frequencies by DEMS licensees.[16] DIRECTV has indicated it is redesigning its system accordingly and indeed has withdrawn its application for the overlapping DEMS spectrum.[17] As a

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Communication Commission, "Blueprint for Spectrum Management," Orlando, Florida (Sep. 23, 1998) (as prepared for delivery).

14 Notice at ¶ 7.

15 Petition of DIRECTV Enterprises, Inc., to Amend Parts 2, 25, and 100 of the Commission's Rules to Allocate Spectrum for the Fixed-Satellite Service and the Broadcasting-Satellite Service, RM No. 9118, *Petition for Rulemaking* (filed June 5, 1997).

16 See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Band, and the Allocation of Additional Spectrum in the 24.75-25.25 GHz Frequency Bands for Broadcast Satellite Service Use, IB Docket No. 98-172, et al., *Comments of DirectTV Enterprises, Inc.*, at 11 (filed Nov. 19, 1998).

17 See Letter to Magalie Roman Salas, Secretary, Federal Communications Commission, from James H. Barker, Counsel for DIRECTV Enterprises, Inc. (Sep. 16, 1999).

result, it would be premature for the Commission to undertake the development of a precise set of rules for cooperation and coexistence between 24 GHz fixed licensees and future satellite licensees at this time in light of the fact that the potential parameters of such a satellite system are currently unknown and, even if defined now, would be likely to change substantially in the next seven years.[18] Such premature development of sharing criteria may unduly constrain the development of operational 24 GHz fixed wireless systems. As the year 2007 approaches, and if and when a potential satellite licensee submits an application for BSS feederlink use of these frequencies, Teligent proposes that at that time a formal working group comprising 24 GHz fixed wireless operators and satellite industry representatives be convened to develop sharing criteria and the appropriate separation distance for non-ubiquitous BSS uplink earth stations in order to

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[18] Although the Commission believes that a "workable solution can be developed" for sharing between 24 GHz DEMS and BSS feeder links in the 25.05-25.25 GHz band, Notice at ¶ 7, Teligent believes that it will be difficult to achieve such a solution unless stringent siting and elevation angle constraints on BSS feeder link stations are adopted. DIRECTV apparently shares this view. See Amendments to Parts 1, 2, and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Comments of DIRECTV Enterprises, Inc.*, at 4 (filed Dec. 10, 1999). First, substantial separation distances will be needed to protect previously-deployed DEMS receivers. Second, the DIRECTV calculation cited by the Commission, see Notice at ¶ 7, purporting to show a required separation distance of only 0.2 miles is based on the extravagant assumption that 40 dB of shielding isolation can be achieved, contrary to the established industry practice that only 15 dB is reliably available. See ITU-R Report 831-1. Teligent's initial calculations that show that a much greater required separation, e.g. 300 miles, is needed under certain circumstances are based on more typical assumptions. Moreover, given the extremely high EIRP of BSS feeder link earth stations compared to DEMS, they would have to comply with stringent out-of-band emission limits to protect DEMS receivers against adjacent channel interference (even if feeder link stations were restricted to the 24.75-25.05 GHz band).

protect incumbent fixed operations at 24 GHz.[19] This process will be facilitated by the requirement that the satellite licensee design its system to operate on a non-interference basis with existing licensees and demonstrate accordingly in its application.[20]

In addition, although the Notice does not reference it, there are currently unlicensed Part 15 users of adjacent 24 GHz frequencies, i.e., 24.05-24.25 GHz. Indeed, a notice of proposed rulemaking relating to the use of this spectrum is currently pending before the Commission.[21] Teligent has participated in that proceeding to ensure that the rules adopted by the Commission with respect to use of this adjacent spectrum will prevent harmful interference to licensed DEMS systems at 24.25-24.45 GHz.[22]

As for the Commission's tentative proposal to use Economic Areas ("EAs") for licensing the 24 GHz band,[23] Teligent agrees that use of EAs, as opposed to some other type of geographic

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19 A similar industry working group was established to create the orbital assignment plan for geostationary-satellite orbit systems in the Ka-band. See Assignment of Orbital Locations to Space Stations in the Ka-Band, *Order*, 13 FCC Rcd 1030 (1997).

20 47 C.F.R. § 25.273; id. § 25.114.

21 Amendment of Part 15 of the Commission's Rules to Allow Certification of Equipment in the 24.05 -24.25 GHz Band at Field Strengths Up to 2500 mV/m, ET Docket No. 98-156, *Notice of Proposed Rulemaking*, 13 FCC Rcd 16385 (1998).

22 While the Commission has proposed an emission mask for 24 GHz transmitters to protect against adjacent channel interference, Notice at n.89, no such emission mask was proposed for unlicensed point-to-point transmitters in the adjacent 24.05-24.25 GHz band. See id. Consequently, Teligent believes that a 10 MHz guard band must be imposed on those unlicensed transmitters to assure such protection; see also Amendment of Part 15 of the Commission's Rules to Allow Certification of Equipment in the 24.05 -24.25 GHz Band at Field Strengths Up to 2500 mV/m, ET Docket No. 98-156, *Comments of Teligent Inc.*, (filed Dec. 7, 1998).

23 Notice at ¶ 9.

licensing area, is appropriate since the Commission is no longer easily able to use Basic Trading Areas (BTAs). This is particularly true since EAs are the market areas to be used in the 39 GHz fixed wireless auction. EAs will assist licensees in serving rural communities because they encompass both urban and rural areas and licensees will be able to take advantage of both scale and scope economies to reach rural customers. Moreover, the relatively small size of an EA territory, vis-à-vis MTA-based licenses, should minimize the burden of build-out requirements thereby encouraging more rapid and intensive use of the spectrum.

Nevertheless, the Commission requests comment on adopting alternative geographic licensing areas for 24 GHz licenses other than EAs.[24] To the extent that 24 GHz licensees desire a contiguous service area larger than an EA, the Commission's proposed rules would permit licensees to aggregate EAs.[25] It is more efficient to assign EA-based licenses, permitting licensees to build to the desired level of service than it is to require, as a condition of entry, the accumulation of unmanageably larger license areas necessitating subsequent disaggregation for many licensees. Similarly, because the Commission will permit disaggregation and partitioning, if a licensee does not desire to use its entire EA licensed area, it is able to sell those portions it chooses not to use.[26] Since the Commission will no longer assign 24 GHz licenses based on the

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24 Id. at ¶ 10.

25 Id. at ¶ 9.

26 See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *First Report and Order*, FCC 00-5, at ¶ 57 (rel. Jan. 7, 2000) ("[T]he best approach is for the Commission to attempt to determine as a starting point the most efficiently sized geographic areas. . . . [T]o the extent that our decision does not result in optimally sized initial areas for all licensees, we are also allowing for post-auction partitioning and aggregation of licenses fro those bidders whose business plans require smaller or larger geographic areas.") ("700 MHz Order").

current licensed Standard Metropolitan Statistical Area (SMSA) which defines Teligent's current licensed service areas due to the fact that such areas would not cover the entire geography of the United States, the EA licensing area appears to be the best alternative.

EA based licenses also provide the greatest opportunity to realize the necessary economies of scale that would be beneficial to all service providers, no matter how large or small the carrier may be.[27] The EA territories are of sufficient size that a licensee could realize efficiencies with respect to all aspects of its operation, including technical operations, sales and marketing, and customer service.[28] Alternatively, license territories much smaller than EAs are unlikely to permit the efficiencies necessary to overcome the large cost of providing facilities-based local exchange services using fixed wireless facilities unless those areas included the most densely populated urban areas.

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27 The Small Business Administration has advocated using smaller geographic areas such as RSAs. See Amendments to Parts 1, 2, and 101 of the Commission's Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Comments of The Office of Advocacy, U.S. Small Business Administration,* at 1-2 (filed Dec. 9, 1999). While smaller license areas may "permit small businesses to compete for geographic licenses that cover precisely the communities that they wish to serve," they may not be of size sufficient to justify the expenditures necessary to provide fixed wireless service. The purpose of section 309 is to not only devise means for small businesses to participate in auctions, but to develop rules that would allow small businesses to succeed as telecommunications service providers. Because this industry is one where service providers must realize some economies of scale to justify the immense cost of building networks, it is highly unlikely that smaller service areas on their own would afford any carrier a serious opportunity of success in the marketplace as a telecommunications service provider, unless such service areas included the most densely populated urban areas.

28 See 700 MHz Order at ¶ 59 (concluding that large license territories for the 700 MHz band permits bidders "[t]o take advantage of opportunities afforded by economies of scale: for developing standard protocols for particular applications and for manufacturing equipment to operate at specific frequencies of the spectrum.").

This notwithstanding, because Teligent has operations in all 74 of its licensed SMSAs and currently offers a full range of commercial communications services in 40 of these markets,[29] it is critical that Teligent's current licensed SMSA areas be excluded from the auctioned EAs that surround the SMSA areas currently licensed to Teligent in the 24 GHz band.[30] In addition, the holder of a 24 GHz EA license acquired through auction must be required to design its system to protect against harmful interference to incumbent operations previously licensed on an SMSA basis in the band.[31] The Commission was presented with an analogous incumbent scenario in the context of the 39 GHz band as well as in amending the MDS rules for service at 2.5 GHz. In both circumstances, the incumbent's license areas differed from the license areas of new licensees, causing a potential for overlap and interference. The Commission appropriately and equitably maintained the status quo for the incumbents in those frequency bands by allowing them to retain the exclusive use of their licensed service areas, free of interference.[32] The Commission properly

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29 "Teligent Enters the Record Books with Communication Industry's Fastest Launch of Local Markets," Teligent Press Release (Dec. 20, 1999) ("Forty markets. Seven thousand buildings. Ten thousand customers. In 14 months.") <*http://teligent.policy.net/proactive/newsroom/release.vtml?id=181011* (last visited Jan. 11, 2000).

30 Id.

31 See Rosston & Steinberg at 112 ("[I]ncumbents do expect that they will be able to continue using spectrum that they have been assigned without additional or unexpected interference, or major new service and technical restrictions.").

32 Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands; Implementation of Section 309 (j) of the Communications Act -- Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz, ET Docket No. 95-183; et al., *Report and Order and Second Notice of Proposed Rule Making*, 12 FCC Rcd 18600, at ¶ 79 (1997) ("39 GHz Order") ("Where an incumbent licensee's rectangular service area occupies only a portion of a BTA, the licensee's channels will be available for application under the new competitive bidding rules, but the incumbent will retain the exclusive right to use those channels within its rectangular service area. The holder of the BTA authorization thus will

placed responsibility for interference protection with the subsequent licensees so as not to disrupt existing operational systems. So too, the Commission's 24 GHz rules must expressly provide that incumbents in the 24 GHz band licensed on a SMSA basis will retain the exclusive right to their licensed channels within the SMSA and that the new licensees must protect against harmful interference to the incumbent through standard interference protection measures. This explicit recognition is necessary to maintain regulatory parity for all current fixed wireless operators, 24 GHz and 39 GHz alike. To the extent this is not clear, the Commission must clarify that incumbent licensees will be afforded full protection in their SMSA territories.

An equally important issue related to Teligent's current operations in the 24 GHz band concerns the equipment it has been authorized by the Commission to use. In particular, Teligent currently operates transmitters pursuant to a waiver of the DEMS emission mask rule in section 101.111. This waiver was necessary because the Commission recognized that when it relocated the incumbent DEMS licensees from 18 GHz to 24 GHz, the emission mask specified in the current rules and previously developed for narrowband operations was not suited to 24 GHz broadband operations, thus equipment manufacturers could not design and manufacture conforming equipment.[33] In order to ensure a sufficient supply of transmitters to meet growing customer needs, Teligent entered into long term contracts with its equipment vendors for the supply of such devices. As a result, Teligent seeks authority to continue using its current

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be required to design its system to protect against harmful interference to the incumbent.").

33 Relatedly, Teligent's equipment vendors have had to obtain waivers of the equipment type acceptance and certification process as well as experimental authorizations in order to commercially provide 24 GHz point-to-multipoint equipment.

transmitters for the remainder of their useful lives, even if they do not conform precisely to the technical rules that will be ultimately adopted for the 24 GHz service in this proceeding. This authority is requested to avoid the disruption and cost that would occur if a phased-in approach to the new equipment specification is not permitted. Thus, with respect to paragraph 12 of the Notice, where the Commission proposes to make incumbent 24 GHz licensees subject to the results of this rulemaking, Teligent respectfully requests that the Commission "grandfather" its current transmitting equipment and clarify that incumbent 24 GHz licensees may continue to operate such "grandfathered" equipment in the 24 GHz band that was operated or procured prior to the adoption of new rules, pursuant to a valid waiver of the Commission's current emission mask rules, for the remainder of the useful life of such equipment. In addition, the Commission should expressly permit incumbent licensees to continue deploying such equipment for some continued period of time after the effective date of the new rules, at a minimum, until new equipment that satisfies the new technical rules becomes commercially available. This would be entirely consistent with the manner in which the Commission has handled other operational changes resulting in the need to design new equipment in the past.[34]

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[34] See, e.g., Licensing of Space Stations in the Domestic Fixed-Satellite Service and Related Provisions, CC Docket No. 81-704, *Report and Order*, 54 Rad. Reg. 577, at ¶¶ 41, 99 (1983) (allowing a three year time period for licensees to upgrade or replace existing transmit antennas due to the cost and difficulty of changing the facilities); Amendment of Part 25 of the Commission's Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacings and to Revise Applications Processing Procedures for Satellite Communication Services, CC Docket No. 86-496, *Second Report and Order and Further Notice of Proposed Rulemaking*, 8 FCC Rcd 1316, at ¶¶ 38-39 (1993) (noting that the deadline by which non-conforming antennas were required to come into compliance with the Commission's revised rules had been extended at least once to allow time for resolution of problems encountered in achieving compliance, and, in this Order, granting an additional year for non-conforming earth stations to comply with the newly revised rules); 47 C.F.R. § 74.641(b) (allowing the

## IV. TELIGENT LARGELY SUPPORTS THE COMMISSION'S PROPOSED APPLICATION, LICENSING, AND PROCESSING RULES AS A MEANS TO AFFORDING LICENSEE'S MAXIMUM FLEXIBILITY.

The Commission has well-served the public interest by proposing rules that afford a maximum level of flexibility to the potential licensee/user of the 24 GHz band, as reflected in the choice of regulatory status, broad license eligibility, partitioning, aggregation/disaggregation, and license term and renewal proposals. These proposed rules reflect an experienced recognition on the part of the Commission that market forces best shape the direction of spectrum development, and that the 24 GHz band, with few exceptions, is no different. In addition, in accordance with the principles of regulatory symmetry discussed above, these proposals, if adopted, will ensure that fixed wireless carriers, which are subject to similar regulatory forces, to a large extent, will operate under consistent regulatory regimes.

Moreover, as evidenced by the events of the past 20 years, the telecommunications industry, by nature, is dynamic. Regulatory micro-management has little practical benefit (and significant potential cost) in today's telecommunications marketplace, a fact that counsels in favor of rules that permit maximum spectrum licensee flexibility. Chairman Kennard recently recognized this in stating:

> A traditional role for government has been to predict the market and write a rule; and to act as gate-keepers to markets, deciding who may enter, and who may not. I believe today's markets are moving too fast for us to act in that role very much longer. Before the ink is dry on a rule, the market has erased the lines drawn by the

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licensees of auxiliary television broadcast antenna systems whose application had been accepted for filing before October 1, 1981 to continue to use the existing system until April 1, 1992, at which time the antenna system must be brought into compliance with the Commission's rules).

rule. Government can step in selectively, but only very selectively.[35]

With these principles in mind, Teligent generally supports the Commission's proposed application, licensing, and processing rules, which are designed to put 24 GHz licensees on the same footing with other similar service providers. Teligent remains concerned, however, that to the extent the Commission adopts its tentative conclusion with respect to ILEC in-region bidding, and ILECs acquire 24 GHz licenses, which Teligent uses to compete directly with the ILEC for local exchange service, the ILECs will be in a unique position to leverage their current in-building presence to obtain a significant competitive advantage over other facilities-based local exchange competitors (including fixed wireless providers). In other words, as the Commission is aware, the ILECs currently have almost 100 percent access to multi-tenant buildings (within their service territories) for free. This access gives them a competitive advantage using their current technology to serve the tenants in those buildings.[36] To enable them to also deploy fixed wireless technology in a manner whereby they can leverage their advantage over competitors that use the same technology as a result of their existing access to the thousands of buildings that competitive fixed wireless local service providers are seeking to access, would appear to run counter to the

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35 Remarks of William E. Kennard, Chairman, Federal Communications Commission, "The New FCC: Fast Flat, and Functional," Georgetown University Law Center, Continuing Legal Education, FCC 2000, Washington, D.C., (Oct. 5, 1999) (as prepared for delivery).

36 See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Service, CC Docket No. 92-297, *Sixth Notice of Proposed Rule Making*, FCC 99-379, at ¶ 36 (rel. Dec. 13, 1999) (noting that "LMDS licensees are encountering difficulties negotiating roof right-of-way agreements and overcoming inside-wiring issues.").

Commission's stated goal in this proceeding to encourage efficient competition "particularly in the local exchange telephone market."[37] Teligent therefore urges the Commission to be cognizant of this fact and to recognize that just as it is critical that 24 GHz licensees find a level playing field with respect to other fixed wireless licensees using different frequency bands, e.g., 28 GHz and 39 GHz, it is equally critical that a level playing field exist among service providers for the same service, e.g., local exchange service providers, regardless of technology used to provide such services. Accordingly, as discussed further below, it is all the more critical that the Commission adopt a non-discriminatory building access requirement so that, at least with respect to this issue, the ILEC's dominant position is somewhat mitigated.

### A. 24 GHz Licensees Should Have The Freedom To Self-Designate Their Regulatory Status.

Consistent with the Commission's approach in both LMDS and the 39 GHz allocation, the Commission proposes to allow 24 GHz applicants to choose common carrier and private carrier status for the same license. In addition, the Commission would permit a change in regulatory status without prior approval upon notification within 30 days.[38] This proposal provides maximum flexibility with minimal regulatory burden upon the licensee and, as the Commission recognizes, would achieve efficiencies in both the licensing and administrative process.[39] Accordingly, Teligent supports the proposed changes to section 101.511, especially the deletion of the requirement in current sections 101.511(b) and (c) which reference tariff-related filing

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37 Notice at ¶ 20.

38 Id. at ¶ 19.

39 Id.

requirements with the Commission.[40] To the extent a 24 GHz licensee offers common carrier services, those services and the associated Title II obligations, including tariff requirements, apply independently of the technology used to provide such services. As a result, there is no need to reiterate these requirements in Part 101 of the rules.

On balance, the changes proposed to section 101.511 and the related changes to section 101.61(c)(9) and (d) ensure that the Commission has sufficient knowledge to permit reasonable enforcement activities (consistent, among other things, with the Commission's statutory foreign ownership limitations) and other section 208 issues without imposing undue reporting or prior approval obligations on the licensee.

### B. If ILECs Are Permitted To Participate In The Auction As The Commission Tentatively Concludes, At A Minimum, The Commission Should Adopt Rules to Ensure Nondiscriminatory Telecommunications Carrier Access To Multi-Tenant Environments.

As noted above, the Commission's primary goal in this proceeding is "to encourage efficient competition, particularly in the local exchange telephone market."[41] The Commission considers possible eligibility rules for the 24 GHz auctions and their effect on the overall objectives of this proceeding, tentatively concluding that open eligibility for 24 GHz licenses does not pose "a significant likelihood of competitive harm in local exchange telephone markets."[42]

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40 Notably, the very act of filing a tariff demonstrates conclusively that the service provided is common carriage since the Title II tariff filing requirement only attaches to common carriers and not private carriers. See 47 U.S.C. § 203. Therefore, the Commission's current requirement is unnecessary.

41 Notice at ¶ 20.

42 Id. at ¶ 21. Given that the FCC's primary goal in this proceeding is to promote competition in local exchange telephone markets, Teligent believes that cable operators offer another strong alternative to ILEC dominance and, hence, should be permitted to participate in the 24 GHz auctions. There is no reason to adopt an in-region bidding

Regardless of whether the FCC's analysis is correct with respect to allowing ILECs to participate in the auctions, it does not evaluate other aspects of in-region ILEC operation at 24 GHz and its potential impact on local competition.

In tentatively concluding that it is unnecessary to restrict ILEC eligibility for the 24 GHz auctions as a means of promoting local exchange telephone competition, [43] the Commission's supporting analysis focuses almost exclusively on the ability of ILECs to acquire all of the licenses in a single geographic area, or on the ability of ILECs to engage successfully in a strategy of buying 24 GHz licenses in the hope of foreclosing or delaying competition.[44] Whatever the merits of these views, the Commission's analysis concerning the ability of ILECs to engage in anticompetitive auction strategies alone is insufficient to fully evaluate the true impact on local service competition that may result from their operation in the 24 GHz band in at least one important respect.

The Communications Act directs the Commission to protect the public interest and meet the statutory goals when specifying eligibility and other characteristics of such licenses.[45] This necessarily includes the manner in which ILECs would operate their 24 GHz licenses. As Teligent and other competitive local exchange carriers have discussed with the Commission on numerous occasions, access to multi-tenant buildings is the single biggest challenge faced today to bringing

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restriction for cable operators because, even if a single entity aggregated all five of the existing DEMS channels in the same market, that entity would lack sufficient capacity to provide competitive multichannel video programming.

43 Id.

44 Id.

45 See 47 U.S.C. § 309(j)(3).